API Well Number: 43047515640000

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Horn Frog 11-29D-13-18

2. TYPE OF WORK
DRILL NEW WELL ◉ REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
WILDCAT

4. TYPE OF WELL
Gas Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
BILL BARRETT CORP

7. OPERATOR PHONE
303 312-8164

8. ADDRESS OF OPERATOR
1099 18th Street Ste 2300, Denver, CO, 80202

9. OPERATOR E-MAIL
dspencer@billbarrettcorp.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
UIT-EDA-001-000

11. MINERAL OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ◉

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ◉ STATE ○ FEE ○

13. NAME OF SURFACE OWNER (if box 12 = 'fee')

14. SURFACE OWNER PHONE (if box 12 = 'fee')

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')
Ute

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ◉

19. SLANT
VERTICAL ○ DIRECTIONAL ◉ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	2455 FNL 1779 FEL	SWNE	29	13.0 S	18.0 E	S
Top of Uppermost Producing Zone	2533 FSL 2299 FEL	NWSE	29	13.0 S	18.0 E	S
At Total Depth	1971 FSL 1959 FWL	NESW	29	13.0 S	18.0 E	S

21. COUNTY
UINTAH

22. DISTANCE TO NEAREST LEASE LINE (Feet)
1959

23. NUMBER OF ACRES IN DRILLING UNIT
640

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
5280

26. PROPOSED DEPTH
MD: 8040 TVD: 7500

27. ELEVATION - GROUND LEVEL
6749

28. BOND NUMBER
LPM 4138148

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
Water Permit # 43-10991

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Cond	24	14	0 - 40	65.0	Unknown	8.6	Unknown	0	0.0	0.0
Surf	12.25	9.625	0 - 1500	36.0	J-55 ST&C	8.6	35/65 Poz	430	1.96	12.4
							Halliburton Premium , Type Unknown	200	1.15	15.8
Prod	7.875	4.5	0 - 8040	11.6	P-110 LT&C	9.5	Halliburton Light , Type Unknown	310	1.96	12.5
							50/50 Poz	1350	1.45	13.4

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME Tracey Fallang **TITLE** Regulatory Manager **PHONE** 303 312-8134

SIGNATURE **DATE** 04/20/2011 **EMAIL** tfallang@billbarrettcorp.com

API NUMBER ASSIGNED
43047515640000

APPROVAL
Permit Manager

CONFIDENTIAL

RECEIVED: Jul. 07, 2011

DRILLING PROGRAM

BILL BARRETT CORPORATION
Horn Frog 11-29D-13-18
2455' FNL, 1779' FEL, SWNE, Sec 29, T13S-R18E (surface)
1971' FSL, 1959' FWL, Sec. 29, T13S-R18E (bottom)
Uintah County, Utah

1 – 2. Estimated Tops of Geological Markers and Formations Expected to Contain Water, Oil and Gas and Other Minerals

Formation	Depth – MD	Depth – TVD
Green River	Surface	Surface
Wasatch	2934'*	2749'*
North Horn	4931'*	4394'*
Dark Canyon	6249'*	5709'*
Price River	6486'*	5944'*
TD	8040'*	7500'*

PROSPECTIVE PAY: *Members of the Mesaverde formation and Wasatch formation (inclusive of the North Horn) are primary objectives for oil/gas. Any shallow water zones encountered will be adequately protected and reported. All potentially productive hydrocarbon zones will be cemented off.

3. BOP and Pressure Containment Data

Depth Intervals	BOP Equipment
0 – 1500'	No pressure control required
1500' – TD	11" 3000# Ram Type BOP 11" 3000# Annular BOP
- Drilling spool to accommodate choke and kill lines;	
- Ancillary equipment and choke manifold rated at 3,000#. All BOP and BOPE tests will be in accordance with the requirements of onshore Order No. 2;	
- The State of Utah Division of Oil, Gas and Mining will be notified 24 hours in advance of all BOP pressure tests.	
- BOP hand wheels may be underneath the sub-structure of the rig if the drilling rig used is set up to operate most efficiently in this manner.	

RECEIVED: Jul. 07, 2011

Bill Barrett Corporation
Drilling Program
Horn Frog 11-29D-13-18
Uintah County, Utah

4. Casing Program

Hole Size	Setting Depth From	To	Casing Size	Casing Weight	Casing Grade	Thread	Condition
24”	Surface	40’	14”	65#			
12 ¼”	Surface	1500’	9 5/8”	36#	Jor K 55	ST&C	New
8 ¾” and 7 7/8”	Surface	TD’	5 ½” 4 ½”	17.0# 11.6#	P-110 P-110	LT&C LT&C	New New
Note: BBC will use one of the options of production casing size noted above. In addition, the 7 7/8” hole size will begin at the point the bit is changed.							

5. Cementing Program

16” Conductor Casing	Grout cement
9 5/8” Surface Casing	*Lead* with approximately 430 sks 35/65/6 cement with additives mixed at 12.4 ppg (yield = 1.96ft^3/sx). *Tail* with approximately 200 sks premium cement with additives mixed at 15.8 ppg (yield = 1.15 ft^3/sx) circulated to surface with 100% excess.
5 ½” Production Casing **OR** 4 ½” Production Casing	*Lead* with approximately 310 sx (4 ½” csg) or 260 sx (5 ½” csg) of Halliburton Light Premium cement with additives mixed at 12.5 ppg (yield = 1.96 ft^3/sx). *Tail* with approximately 1350 sx (4 ½” csg) or 1110 sx (5 ½” csg) of 50/50 Poz cement with additives mixed at 13.4 ppg (yield = 1.45 ft^3/sk), circulated to ~800’ with 15% excess.
Note: Actual volumes to be calculated from caliper log.	

6. Mud Program

Interval	Weight	Viscosity	Fluid Loss (API filtrate)	Remarks
0 – 40’	8.3 – 8.6	27 – 40	--	Native Spud Mud
40’ – 1500’	8.3 – 8.6	27 – 40	15 cc or less	Native/Gel/Lime
1500’ – TD	8.6 – 9.5	38 – 46	15 cc or less	LSND/DAP
Note: Sufficient mud materials to maintain mud properties, control lost circulation and to contain “kicks” will be available at wellsite. BBC may require minor amounts of diesel to be added to its fluid system in order to reduce torque and drag.				

7. Testing, Logging and Core Programs

Cores	None anticipated;
Testing	None anticipated;
Sampling	30’ to 50’ samples; surface casing to TD. Preserve samples all show intervals;
Surveys	Run every 1000’ and on trips, slope only;
Logging	DIL-GR-SP, FDC-CNL-GR-CAL-Pe-Microlog, Sonic-GR, all TD to surface.

RECEIVED: Jul. 07, 2011

Bill Barrett Corporation
Drilling Program
Horn Frog 11-29D-13-18
Uintah County, Utah

8. Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures or other hazards are anticipated.

Maximum anticipated bottom hole pressure equals approximately 3705 psi* and maximum anticipated surface pressure equals approximately 2055 psi** (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

*Max Mud Wt x 0.052 x TD_{TVD} = A (bottom hole pressure)
**Maximum surface pressure = A – (0.22 x TD_{TVD})

---

9. Auxiliary Equipment

a) Upper kelly cock; lower Kelly cock will be installed while drilling
b) Inside BOP or stab-in valve (available on rig floor)
c) Safety valve(s) and subs to fit all string connections in use
d) Mud monitoring will be visually observed

10. Drilling Schedule

Location Construction:	June 17, 2011
Spud:	June 26, 2011
Duration:	13 days drilling time
	30 days completion time

RECEIVED: Jul. 07, 2011

Other -Onshore Variances Requested

Use of EFM and Flow Conditioner (Onshore Order No. 5)
Use of an electronic flow meter (EFM) for gas measurement purposes is requested with this application.

Use of a flow conditioner is also being requested (versus straightening vanes). Flow conditioners have been proven to be as or more effective than straightening vanes in conditioning gas for measurement. In addition to their superior conditioning properties, they take up less space (shorter meter runs/smaller footprint), and are less prone to corrosion and dislodging (greater reliability). In the past BBC has experienced straightening vanes becoming dislodged in normal service and compromising their conditioning effectiveness.

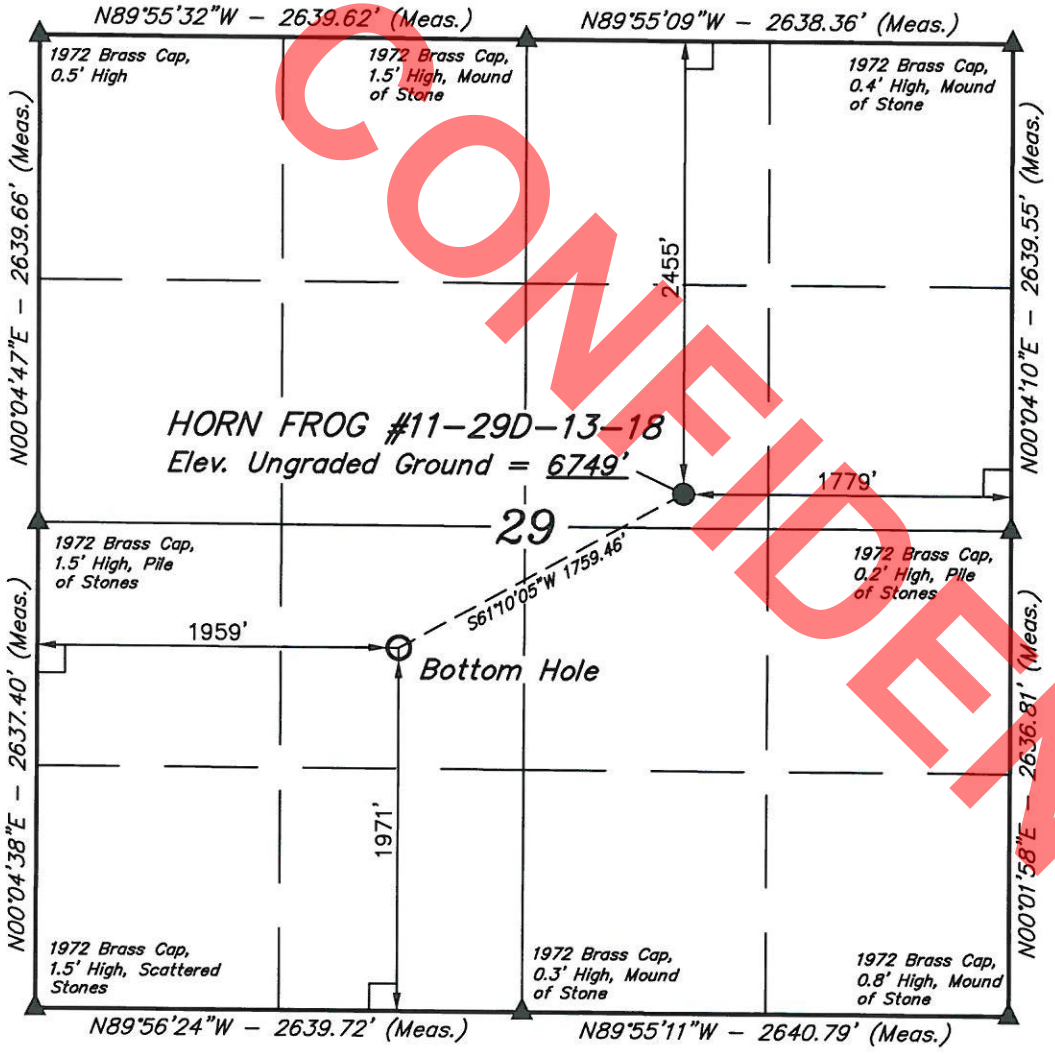
Make/Model: CPA 50E
Dimensions: 2" or 3" Flanged conditioners - 16" minimum up to 3 1/2' long x 2" (ID 2.067) OR 24" minimum up to 3 1/2' long x 3" (ID 3.068)

Air Drilling (Onshore Order No. 2)
Air drilling operations will be conducted with the purpose of drilling and setting surface casing with a truck mounted air rig, for all Federal wells located at this pad. Surface casing is approximately 1000'. Bill Barrett Corporation with comply with the following surface air drilling operation requirements:

1. Properly lubricated and maintained diverter system in place of a rotating head. The diverter system forces air and cutting returns to the cuttings pit and is used solely to drill the surface hole. In addition, BBC will use a properly lubricated and maintained rotating head in compliance with OOG No. 2.
2. The Blooie line will discharge at least 100 feet from the wellbore and will be securely anchored.
3. An automatic igniter or continuous pilot light will be installed at the end of the blooie line.
4. Compressors that supply energy to drill the air filled surface hole will be located 100' away from the wellbore and on the opposite side of the blooie line. The compressors will be equipped with 1) emergency kill switch, 2) pressure relief valves 3) spark arresters on the motors.

RECEIVED: Jul. 07, 2011

T13S, R18E, S.L.B.&M.



BILL BARRETT CORPORATION

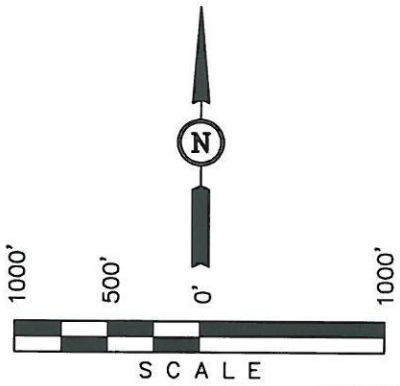
Well location, HORN FROG #11–29D–13–18, located as shown in the SW 1/4 NE 1/4 of Section 29, T13S, R18E, S.L.B.&M., Uintah County, Utah.

BASIS OF ELEVATION

BENCH MARK (47 WF) LOCATED IN THE NW 1/4 OF SECTION 22, T12S, R19E, S.L.B.&M., TAKEN FROM THE DOG KNOLL QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED ON CAP AS BEING 6473 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR NO. 161319 ROBERT L. KAY STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789–1017

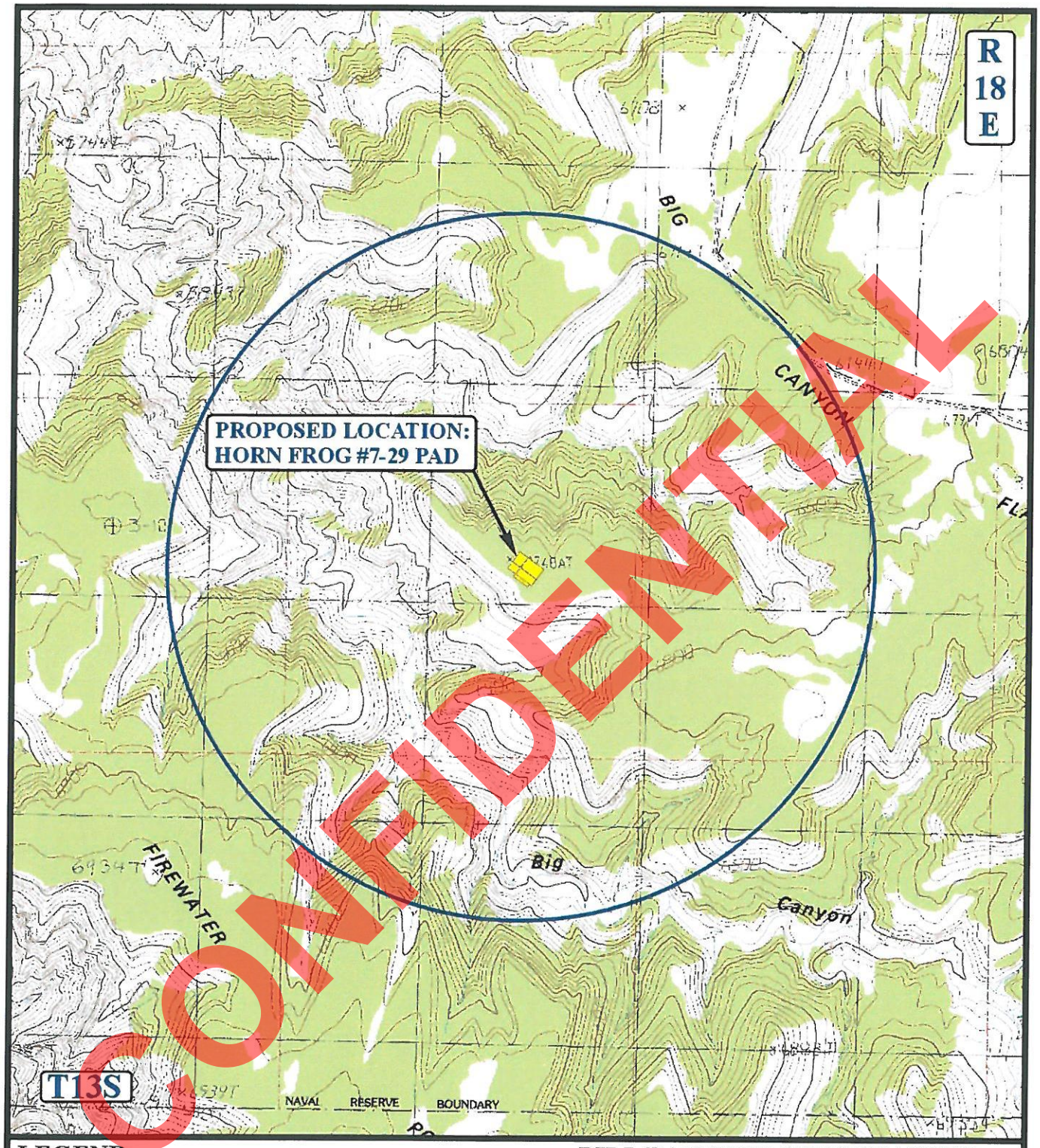
LEGEND:

└ = 90° SYMBOL
● = PROPOSED WELL HEAD.
▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 39°39'21.15" (39.655875)	LATITUDE = 39°39'29.56" (39.658211)
LONGITUDE = 109°55'43.48" (109.928744)	LONGITUDE = 109°55'23.80" (109.923278)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 39°39'21.28" (39.655911)	LATITUDE = 39°39'29.69" (39.658247)
LONGITUDE = 109°55'40.96" (109.928044)	LONGITUDE = 109°55'21.28" (109.922578)
STATE PLANE NAD 27	STATE PLANE NAD 27
N: 485605.90 E: 2442552.47	N: 486483.48 E: 2444076.64

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	09–27–10	09–30–10
PARTY: A.F. J.C. C.C.	REFERENCES: G.L.O. PLAT	
WEATHER: WARM	FILE: BILL BARRETT CORPORATION	

CONFIDENTIAL



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS
- WATER WELLS
- ABANDONED WELLS
- TEMPORARILY ABANDONED

N

BILL BARRETT CORPORATION

HORN FROG #7-29 PAD
SECTION 29, T13S, R18E, S.L.B.&M.
SW 1/4 NE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP | 10 MONTH | 06 DAY | 10 YEAR | C TOPO

SCALE: 1" = 2000' | DRAWN BY: Z.L. | REVISED: 00-00-00

RECEIVED: Jul. 07, 2011

Bill Barrett Corporation

Bill Barrett Corp.

Uintah County, Utah [NAD27]
Pad 2
Horn Frog 11-29D-13-18

Wellbore #1

Plan: plan1 04apr11 smw

Standard Planning Report

04 April, 2011

Sharewell Energy Services, LP

RECEIVED: Jul. 07, 2011

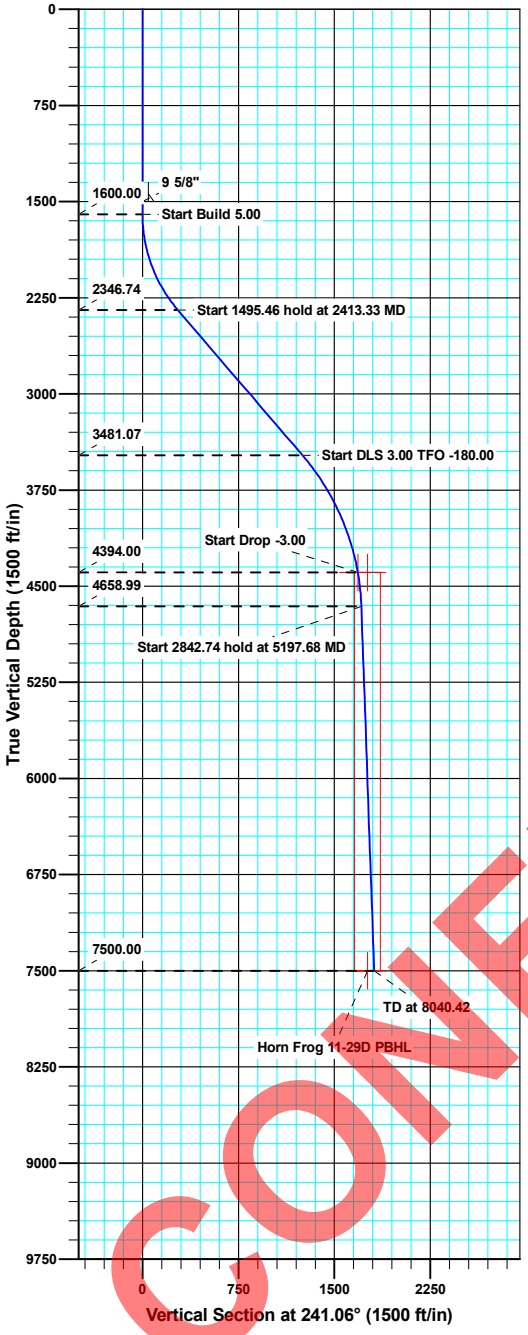
Bill Barrett Corporation

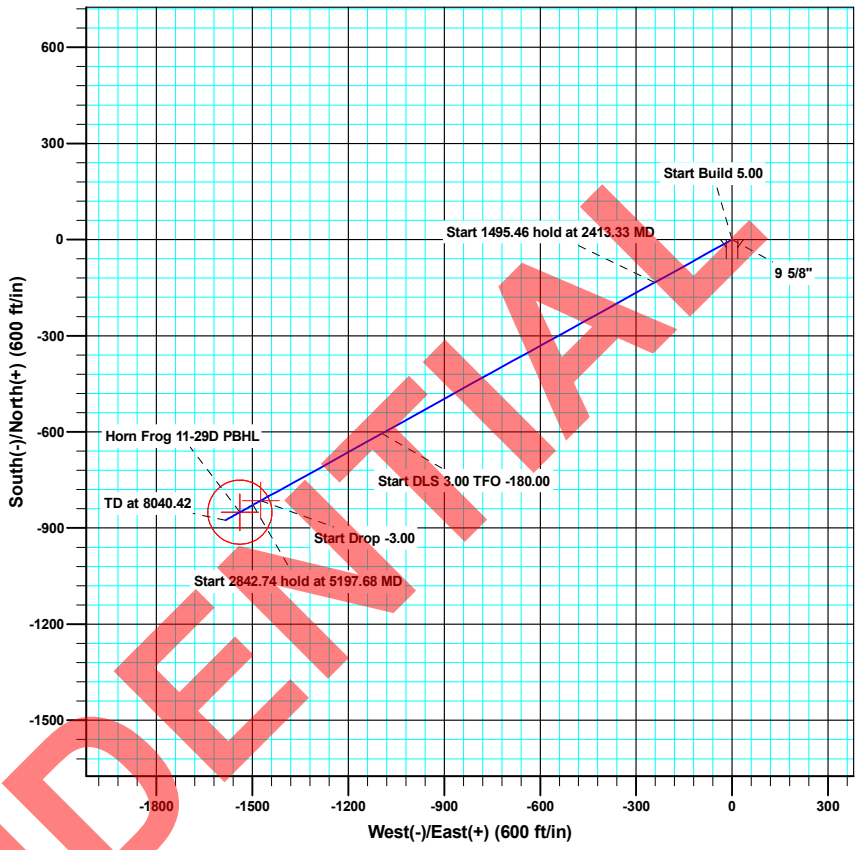
WELL DETAILS: Horn Frog 11-29D-13-18

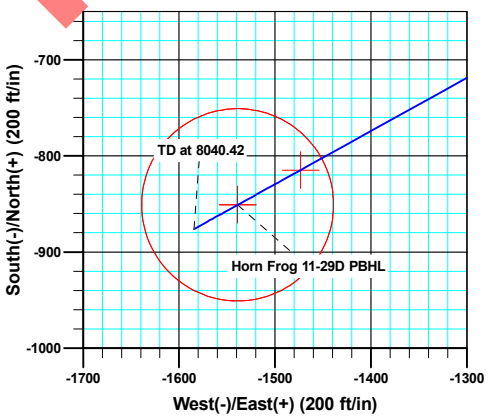
US State Plane 1927 (Exact solution) , Utah Central 4302 , NAD 1927 (NADCON CONUS)

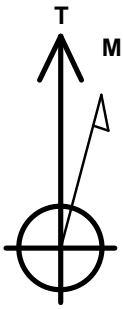
Ground Level: 6747.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	486483.66	2444076.27	39° 39' 29.69 N	109° 55' 21.28 W









Azimuths to True North
Magnetic North: 11.20°

Magnetic Field
Strength: 52125.6snT
Dip Angle: 65.52°
Date: 04/04/2011
Model: IGRF200510

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.000	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	
2413.33	40.667	241.06	2346.74	-133.90	-242.17	5.00	241.06	276.72	
3908.79	40.667	241.06	3481.07	-605.47	-1095.00	0.00	0.00	1251.25	
4931.01	10.000	241.06	4394.00	-814.61	-1473.22	3.00	-180.00	1683.44	Horn Frog 11-29D Target 1
5197.68	2.000	241.06	4658.99	-828.08	-1497.60	3.00	180.00	1711.29	
8040.42	2.000	241.06	7500.00	-876.09	-1584.42	0.00	0.00	1810.50	Horn Frog 11-29D PBHL

Sharewell Energy Services, LP

RECEIVED: Jul. 07, 2011

API Well Number: 43047515640000

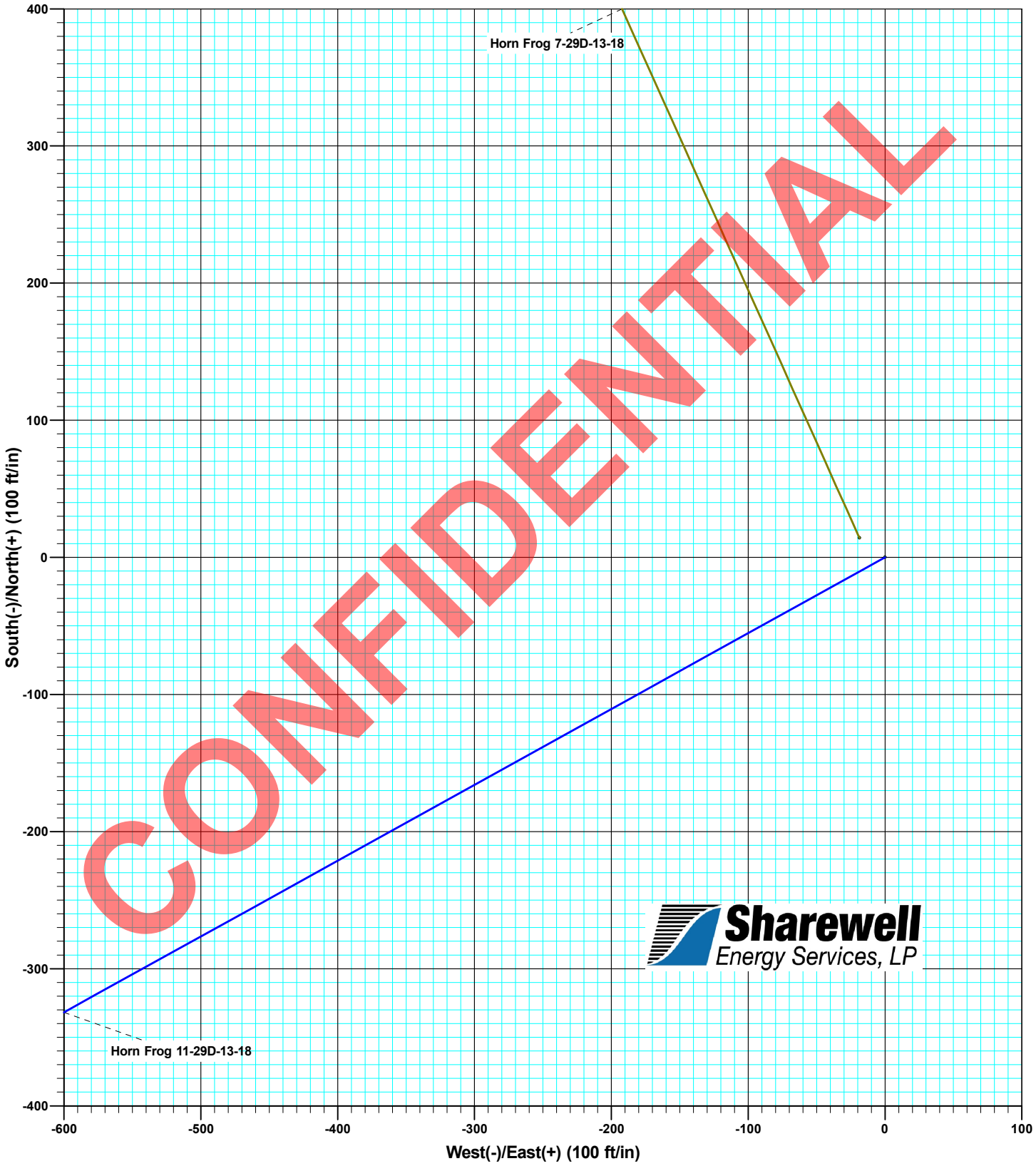
Bill Barrett Corporation

WELL DETAILS: Pad 2

US State Plane 1927 (Exact solution) , Utah Central 4302 , NAD 1927 (NADCON CONUS)

Ground Level: 6747.00

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.00	0.00	486483.66	2444076.27	39° 39' 29.69 N	109° 55' 21.28 W



RECEIVED: Jul. 07, 2011

Bill Barrett Corporation

Sharewell
Planning Report

Sharewell Energy Services, LP

Database:	Compass VM	**Local Co-ordinate Reference:**	Well Horn Frog 11-29D-13-18
Company:	Bill Barrett Corp.	**TVD Reference:**	GL @ 6747.00ft
Project:	Uintah County, Utah [NAD27]	**MD Reference:**	GL @ 6747.00ft
Site:	Pad 2	**North Reference:**	True
Well:	Horn Frog 11-29D-13-18	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 04apr11 smw		

Project Uintah County, Utah [NAD27]

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Utah Central 4302		

Site Pad 2

Site Position:		**Northing:**	486,497.54 usft	**Latitude:**	39° 39' 29.83 N
From:	Lat/Long	**Easting:**	2,444,057.45 usft	**Longitude:**	109° 55' 21.52 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	1.10 ft	**Grid Convergence:**	1.01 °

Well Horn Frog 11-29D-13-18

Well Position	**+N/-S**	-14.21 ft	**Northing:**	486,483.66 usft	**Latitude:**	39° 39' 29.69 N
	+E/-W	18.58 ft	**Easting:**	2,444,076.28 usft	**Longitude:**	109° 55' 21.28 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**		**Ground Level:**	6,747.00 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	04/04/11	11.20	65.52	52,126

Design plan1 04apr11 smw

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	241.06

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	0.000	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,413.33	40.667	241.06	2,346.74	-133.90	-242.17	5.00	5.00	0.00	241.06	
3,908.79	40.667	241.06	3,481.07	-605.47	-1,095.00	0.00	0.00	0.00	0.00	
4,931.01	10.000	241.06	4,394.00	-814.61	-1,473.22	3.00	-3.00	0.00	-180.00	Horn Frog 11-29D Ta
5,197.68	2.000	241.06	4,658.99	-828.08	-1,497.60	3.00	-3.00	0.00	180.00	
8,040.42	2.000	241.06	7,500.00	-876.09	-1,584.42	0.00	0.00	0.00	0.00	Horn Frog 11-29D PB

Bill Barrett Corporation

Sharewell
Planning Report

Sharewell Energy Services, LP

Database:	Compass VM	**Local Co-ordinate Reference:**	Well Horn Frog 11-29D-13-18
Company:	Bill Barrett Corp.	**TVD Reference:**	GL @ 6747.00ft
Project:	Uintah County, Utah [NAD27]	**MD Reference:**	GL @ 6747.00ft
Site:	Pad 2	**North Reference:**	True
Well:	Horn Frog 11-29D-13-18	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 04apr11 smw		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,600.00	0.000	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 5.00									
1,700.00	5.000	241.06	1,699.87	-2.11	-3.82	4.36	5.00	5.00	0.00
1,800.00	10.000	241.06	1,798.99	-8.42	-15.24	17.41	5.00	5.00	0.00
1,900.00	15.000	241.06	1,896.58	-18.89	-34.17	39.05	5.00	5.00	0.00
2,000.00	20.000	241.06	1,991.93	-33.44	-60.48	69.11	5.00	5.00	0.00
2,100.00	25.000	241.06	2,084.28	-51.95	-93.96	107.36	5.00	5.00	0.00
2,200.00	30.000	241.06	2,172.96	-74.29	-134.35	153.52	5.00	5.00	0.00
2,300.00	35.000	241.06	2,257.27	-100.28	-181.36	207.24	5.00	5.00	0.00
2,400.00	40.000	241.06	2,336.58	-129.73	-234.62	268.09	5.00	5.00	0.00
2,413.33	40.667	241.06	2,346.74	-133.90	-242.17	276.72	5.00	5.00	0.00
Start 1495.46 hold at 2413.33 MD									
2,500.00	40.667	241.06	2,412.48	-161.23	-291.59	333.20	0.00	0.00	0.00
2,600.00	40.667	241.06	2,488.33	-192.77	-348.62	398.37	0.00	0.00	0.00
2,700.00	40.667	241.06	2,564.18	-224.30	-405.65	463.53	0.00	0.00	0.00
2,800.00	40.667	241.06	2,640.04	-255.83	-462.68	528.70	0.00	0.00	0.00
2,900.00	40.667	241.06	2,715.89	-287.37	-519.71	593.86	0.00	0.00	0.00
3,000.00	40.667	241.06	2,791.74	-318.90	-576.73	659.03	0.00	0.00	0.00
3,100.00	40.667	241.06	2,867.59	-350.43	-633.76	724.19	0.00	0.00	0.00
3,200.00	40.667	241.06	2,943.44	-381.97	-690.79	789.36	0.00	0.00	0.00
3,300.00	40.667	241.06	3,019.29	-413.50	-747.82	854.53	0.00	0.00	0.00
3,400.00	40.667	241.06	3,095.14	-445.03	-804.85	919.69	0.00	0.00	0.00
3,500.00	40.667	241.06	3,171.00	-476.57	-861.88	984.86	0.00	0.00	0.00
3,600.00	40.667	241.06	3,246.85	-508.10	-918.90	1,050.02	0.00	0.00	0.00
3,700.00	40.667	241.06	3,322.70	-539.63	-975.93	1,115.19	0.00	0.00	0.00
3,800.00	40.667	241.06	3,398.55	-571.17	-1,032.96	1,180.35	0.00	0.00	0.00
3,900.00	40.667	241.06	3,474.40	-602.70	-1,089.99	1,245.52	0.00	0.00	0.00
3,908.79	40.667	241.06	3,481.07	-605.47	-1,095.00	1,251.25	0.00	0.00	0.00
Start DLS 3.00 TFO -180.00									
4,000.00	37.930	241.06	3,551.64	-633.42	-1,145.55	1,309.01	3.00	-3.00	0.00
4,100.00	34.930	241.06	3,632.09	-662.15	-1,197.51	1,368.39	3.00	-3.00	0.00
4,200.00	31.930	241.06	3,715.54	-688.81	-1,245.72	1,423.48	3.00	-3.00	0.00
4,300.00	28.930	241.06	3,801.75	-713.32	-1,290.04	1,474.12	3.00	-3.00	0.00
4,400.00	25.930	241.06	3,890.50	-735.61	-1,330.35	1,520.18	3.00	-3.00	0.00
4,500.00	22.930	241.06	3,981.54	-755.62	-1,366.54	1,561.54	3.00	-3.00	0.00
4,600.00	19.930	241.06	4,074.61	-773.29	-1,398.51	1,598.07	3.00	-3.00	0.00
4,700.00	16.930	241.06	4,169.47	-788.59	-1,426.18	1,629.68	3.00	-3.00	0.00
4,800.00	13.930	241.06	4,265.86	-801.46	-1,449.46	1,656.28	3.00	-3.00	0.00
4,900.00	10.930	241.06	4,363.50	-811.88	-1,468.29	1,677.81	3.00	-3.00	0.00
4,931.01	10.000	241.06	4,394.00	-814.61	-1,473.22	1,683.44	3.00	-3.00	0.00
Start Drop -3.00 - Horn Frog 11-29D Target 1									
4,942.70	9.649	241.06	4,405.52	-815.57	-1,474.97	1,685.43	3.00	-3.00	0.00
Horn Frog 11-29D Target									
5,000.00	7.930	241.06	4,462.14	-819.81	-1,482.63	1,694.19	3.00	-3.00	0.00
5,100.00	4.930	241.06	4,561.50	-825.23	-1,492.43	1,705.39	3.00	-3.00	0.00
5,197.68	2.000	241.06	4,658.99	-828.08	-1,497.60	1,711.29	3.00	-3.00	0.00
Start 2842.74 hold at 5197.68 MD									
5,200.00	2.000	241.06	4,661.31	-828.12	-1,497.67	1,711.37	0.00	0.00	0.00
5,300.00	2.000	241.06	4,761.25	-829.81	-1,500.72	1,714.86	0.00	0.00	0.00
5,400.00	2.000	241.06	4,861.19	-831.50	-1,503.78	1,718.35	0.00	0.00	0.00
5,500.00	2.000	241.06	4,961.13	-833.19	-1,506.83	1,721.84	0.00	0.00	0.00
5,600.00	2.000	241.06	5,061.06	-834.88	-1,509.88	1,725.33	0.00	0.00	0.00
5,700.00	2.000	241.06	5,161.00	-836.57	-1,512.94	1,728.82	0.00	0.00	0.00

RECEIVED: Jul. 07, 2011

Bill Barrett Corporation

Sharewell
Planning Report

Sharewell Energy Services, LP

Database:	Compass VM	**Local Co-ordinate Reference:**	Well Horn Frog 11-29D-13-18
Company:	Bill Barrett Corp.	**TVD Reference:**	GL @ 6747.00ft
Project:	Uintah County, Utah [NAD27]	**MD Reference:**	GL @ 6747.00ft
Site:	Pad 2	**North Reference:**	True
Well:	Horn Frog 11-29D-13-18	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 04apr11 smw		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,800.00	2.000	241.06	5,260.94	-838.25	-1,515.99	1,732.31	0.00	0.00	0.00
5,900.00	2.000	241.06	5,360.88	-839.94	-1,519.05	1,735.80	0.00	0.00	0.00
6,000.00	2.000	241.06	5,460.82	-841.63	-1,522.10	1,739.29	0.00	0.00	0.00
6,100.00	2.000	241.06	5,560.76	-843.32	-1,525.16	1,742.78	0.00	0.00	0.00
6,200.00	2.000	241.06	5,660.70	-845.01	-1,528.21	1,746.27	0.00	0.00	0.00
6,300.00	2.000	241.06	5,760.64	-846.70	-1,531.26	1,749.76	0.00	0.00	0.00
6,400.00	2.000	241.06	5,860.58	-848.39	-1,534.32	1,753.25	0.00	0.00	0.00
6,500.00	2.000	241.06	5,960.52	-850.08	-1,537.37	1,756.74	0.00	0.00	0.00
6,600.00	2.000	241.06	6,060.46	-851.76	-1,540.43	1,760.23	0.00	0.00	0.00
6,700.00	2.000	241.06	6,160.39	-853.45	-1,543.48	1,763.72	0.00	0.00	0.00
6,800.00	2.000	241.06	6,260.33	-855.14	-1,546.53	1,767.21	0.00	0.00	0.00
6,900.00	2.000	241.06	6,360.27	-856.83	-1,549.59	1,770.70	0.00	0.00	0.00
7,000.00	2.000	241.06	6,460.21	-858.52	-1,552.64	1,774.19	0.00	0.00	0.00
7,100.00	2.000	241.06	6,560.15	-860.21	-1,555.70	1,777.68	0.00	0.00	0.00
7,200.00	2.000	241.06	6,660.09	-861.90	-1,558.75	1,781.17	0.00	0.00	0.00
7,300.00	2.000	241.06	6,760.03	-863.59	-1,561.81	1,784.66	0.00	0.00	0.00
7,400.00	2.000	241.06	6,859.97	-865.27	-1,564.86	1,788.15	0.00	0.00	0.00
7,500.00	2.000	241.06	6,959.91	-866.96	-1,567.91	1,791.64	0.00	0.00	0.00
7,600.00	2.000	241.06	7,059.85	-868.65	-1,570.97	1,795.13	0.00	0.00	0.00
7,700.00	2.000	241.06	7,159.78	-870.34	-1,574.02	1,798.62	0.00	0.00	0.00
7,800.00	2.000	241.06	7,259.72	-872.03	-1,577.08	1,802.11	0.00	0.00	0.00
7,900.00	2.000	241.06	7,359.66	-873.72	-1,580.13	1,805.60	0.00	0.00	0.00
8,000.00	2.000	241.06	7,459.60	-875.41	-1,583.18	1,809.09	0.00	0.00	0.00
8,038.61	2.000	241.06	7,498.18	-876.06	-1,584.36	1,810.44	0.00	0.00	0.00
Horn Frog 11-29D PBHL									
8,040.42	2.000	241.06	7,500.00	-876.09	-1,584.42	1,810.50	0.00	0.00	0.00
TD at 8040.42									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Horn Frog 11-29D Targe - plan hits target center - Point	0.000	0.00	4,394.00	-814.61	-1,473.22	485,643.20	2,442,617.65	39° 39' 21.64 N	109° 55' 40.12 W
Horn Frog 11-29D Targe - plan misses target center by 73.90ft at 4942.70ft MD (4405.52 TVD, -815.57 N, -1474.97 E) - Circle (radius 100.00)	0.000	0.00	4,394.00	-850.77	-1,538.92	485,605.88	2,442,552.60	39° 39' 21.28 N	109° 55' 40.96 W
Horn Frog 11-29D PBHL - plan misses target center by 52.03ft at 8038.61ft MD (7498.18 TVD, -876.06 N, -1584.36 E) - Point	0.000	0.00	7,500.00	-850.77	-1,538.92	485,605.88	2,442,552.60	39° 39' 21.28 N	109° 55' 40.96 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (ft)	Hole Diameter (ft)
1,500.00	1,500.00	9 5/8"	0.80	1.02

RECEIVED: Jul. 07, 2011

Bill Barrett Corporation

Sharewell
Planning Report

Sharewell Energy Services, LP

Database:	Compass VM	**Local Co-ordinate Reference:**	Well Horn Frog 11-29D-13-18
Company:	Bill Barrett Corp.	**TVD Reference:**	GL @ 6747.00ft
Project:	Uintah County, Utah [NAD27]	**MD Reference:**	GL @ 6747.00ft
Site:	Pad 2	**North Reference:**	True
Well:	Horn Frog 11-29D-13-18	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	plan1 04apr11 smw		

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,600.00	1,600.00	0.00	0.00	Start Build 5.00
2,413.33	2,346.74	-133.90	-242.17	Start 1495.46 hold at 2413.33 MD
3,908.79	3,481.07	-605.47	-1,095.00	Start DLS 3.00 TFO -180.00
4,931.01	4,394.00	-814.61	-1,473.22	Start Drop -3.00
5,197.68	4,658.99	-828.08	-1,497.60	Start 2842.74 hold at 5197.68 MD
8,040.42	7,500.00	-876.09	-1,584.42	TD at 8040.42

SURFACE USE PLAN

BILL BARRETT CORPORATION

Horn Frog #11-29D-13-18 (Horn Frog 7-29 Pad)
(SWNE), 2455' FNL, 1779' FEL, Sec. 29, T13S-R18E (surface)
(NESW), 1971' FSL, 1959' FWL, Sec. 29, T13S-R18E (bottom)
Uintah County, UT

This is a new pad with a total of nine directional wells proposed. One would be drilled initially and the other eight wells are proposed in the future.

The Ute Tribal onsite for this pad occurred October 27, 2010.

The proposed pad is located in the Naval Oil Shale Reserve No. 2 area of Uintah County with 10.373 feet of access from the existing Horn Frog 8-9 Pad access road. A pipeline corridor, which may contain multiple pipes within the corridor, is proposed with this application and would traverse 10,324feet to the existing pipeline servicing the Horn Frog 8-9 Pad. If the pad proves to be incapable of producing natural gas in commercial quantities, wells would be plugged and abandoned and the location reclaimed according to Ute Tribe, and other applicable agency, standards.

The excavation contractor would be provided with an approved copy of the surface use plan of operations before initiating construction.

1. Existing Roads:

   a. The proposed pad is located approximately 49.9 miles southwest of Ouray, Utah. Maps reflecting directions to the proposed pad are included (see Topographic maps A and B).

   b. The existing access to the Horn Frog 8-9 Pad would be utilized to a point where new access begins.

   c. The use of roads under State and County Road Department maintenance is necessary to access the Horn Frog area. However, an encroachment permit is not anticipated as there are no upgrades to the State or County road systems proposed at this time.

   d. No topsoil stripping would occur as there are no improvements proposed to existing State, County or main Ute Tribe access roads.

   e. Project roads would require routine year-round maintenance to provide year-round access. Maintenance would include inspections, reduction of ruts and holes, maintenance to keep water off the road, replacement of surfacing materials, and clearing of sediment blocking ditches and culverts. Should snow removal become necessary, roads would be cleared with a scraper and snow would be stored along the down gradient side to prohibit runoff onto the road. Aggregate would be used as necessary to maintain a solid running surface and minimize dust generation.

   f. Vehicle operators would obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions. Travel would be limited to the existing access roads and proposed access road.

   g. All existing roads would be upgraded from their existing condition where needed, maintained, and kept in good repair during all phases of operation.

2. Planned Access Road:

   a. From the existing Horn Frog 8-9 Pad access road BBC would construct a new access that would traverse west for approximately 10,373 feet (see Topographic Map B). A road design plan is not anticipated at this time.

   b. BBC anticipates constructing the road to minimum standards required to support drilling and completions activity. Once the well has been tested and proven to produce paying quantities of

RECEIVED: Jul. 07, 2011

h. In addition, approximately 1200 feet of pipeline would be installed within the existing Horn Frog 8-9 pad pipeline ROW to a future tie-in valve. This corridor may contain multiple lines.

i. The new segment of gas pipeline would be surface laid line within a 30 foot wide pipeline ROW (7.111 acres). The pipeline has been applied for and is pending approval at this time.

j. The proposed new gas pipeline would be constructed of steel or Flex Steel™ while the liquids lines would be constructed of steel, polyethylene, or Flex Steel™.

k. BBC intends on stringing the pipeline on the surface, welding many joints into long lengths, dragging the long lengths into position and then completing a final welding pass to join the long lengths together. BBC intends on connecting the pipeline together following manufacturers specifications.

l. The pipeline would be constructed to allow pigging of the line with a pig launcher and receiver installed within the approved right-of-way width near the tie-in points of the pipeline.

m. Pipeline construction methods and practices would be planned and conducted by BBC with the objective of enhancing reclamation and fostering the re-establishment of the native plant community.

n. All **permanent** above-ground structures would be painted a flat, non-reflective Olive Black, or other approved color as described in the onsite process, to match the standard environmental colors. These structures would be painted the designated color at the time of installation or within 6 months of being located on site. Facilities that are required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

o. Site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 would be adhered to. Any changes to facilities proposed within this surface use plan would be depicted on the site security diagram submitted.

p. The site would require periodic maintenance to ensure that drainages are kept open and free of debris, and that surfaces are properly treated to reduce erosion, fugitive dust, and impacts to adjacent areas.

5. Location and Type of Water Supply:

a. Water would be hauled from one of the following sources:
- Water Permit # 43-10991, Section 9, T8S, R20E;
- Water Permit #43-2189, Section 33, T8S, R20E;
- Water Permit #49-2158, Section 33, T8S, R20E;
- Water Permit #49-2262, Section 33, T8S, R20E;
- Water Permit #49-1645, Section 5, T9S, R22E;
- Water Permit #43-9077, Section 32, T6S, R20E;
- Tribal Resolution 06-183, Section 22, T10S, R20E;

b. No new water well is proposed with this application.

c. Should additional water sources be pursued they would be properly permitted through the State of Utah – Division of Water Rights. Additionally, the Ute Tribe would be notified of any changes in water supply.

d. Water use would vary in accordance with the formations to be drilled but would average approximately 1 acre-foot (7,758 barrels) during drilling operations and 1 acre-foot (7,758 barrels) during completion operations.

RECEIVED: Jul. 07, 2011

hydrocarbons BBC would upgrade the road to the appropriate standards suitable for production & maintenance operations.

c. A tribal right of way (ROW) is applied for and pending approval for the well site and access road (total ROW acreage = 7.144 ac). The road would be constructed to a 30-foot ROW width with an 18-foot travel surface.

d. The proposed road would be constructed to facilitate drainage, control erosion and minimize visual impacts by following natural contours where practical. No unnecessary side-casting of material would occur on steep slopes.

e. Intervisible turnouts would be constructed, where necessary and as topographic conditions allow, in order to improve traffic safety. A maximum grade of 10 percent would be maintained with minimum cuts and fills, as necessary, to access the well pad.

f. New road construction and improvements of existing roads would typically require the use of motor graders, crawler tractors, 10-yard end dump trucks, and water trucks. The standard methodology for building new roads involves the use of a crawler tractor or track hoe to windrow the vegetation to one side of the road corridor, remove topsoil to the opposing side of the corridor, and rough-in the roadway. This is followed by a grader or bulldozer to establish barrow ditches and crown the road surface. Where culverts are required, a track hoe or backhoe would trench the road and install the culverts. Some hand labor would be required when installing and armoring culverts. Road base or gravel in some instances would be necessary and would be hauled in and a grader used to smooth the running surface.

g. Excess rock from construction of the pad may be crushed on site and used for surfacing of the access road if necessary. Any additional aggregate necessary would be obtained from private or State of Utah lands in conformance with applicable regulations. Aggregate would be of sufficient size, type, and amount to allow all weather access and alleviate dust.

h. Where topsoil removal is necessary, it would be windrowed (i.e. stockpiled/accumulated along the edge of the ROW and in a low row/pile parallel with the ROW) and re-spread over the disturbed area after construction and backfilling are completed. Vegetation removed from the disturbed area would also be re-spread to provide protection, nutrient recycling, and a seed source for reclamation.

i. One 18 inch culvert where the proposed access road begins is anticipated. Adequate drainage structures, where necessary, would be incorporated into the remainder of the road to prevent soil erosion and accommodate all-weather traffic.

j. No gates or cattle guards are anticipated at this time.

k. Surface disturbance and vehicular travel would be limited to the approved location access road. Adequate signs would be posted, as necessary, to warn the public of project related traffic. All BBC employees, contractors, subcontractors and project related personnel would obtain and carry the appropriate access permits necessary to conduct business on Ute Tribal lands at the time of operation.

l. All access roads and surface disturbing activities would conform to the appropriate standard, no higher than necessary, to accommodate their intended function adequately as outlined in the Bureau of Land Management and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development, Fourth Edition – Revised 2007. BBC would be responsible for all maintenance of the access road.

RECEIVED: Jul. 07, 2011

3. Location of Existing Wells (see One-Mile Radius Map):

a. Following is a list of wells with surface hole locations within a one-mile radius of the proposed pad:

i.	water wells	none
ii.	injection wells	none
iii.	disposal wells	none
iv.	drilling wells	none
v.	temp shut-in wells	none
vi.	producing wells	none
vii.	abandoned wells	none

4. Location of Production Facilities:

a. Surface facilities for the pad would consist of multiple well heads, separators, gas meters, line heaters , 500 gal methanol tanks, 500 bbl oil tanks, 500 bbl water tanks, 500 bbl test tanks, pumping units or gas lifts with natural gas fired motor, solar panels, solar chemical pump, methanol pumps and two trace pumps.

b. Proposed wellheads and christmas trees may be contained below location grade in pre-cast concrete trenches to accommodate potential future drilling. All wellheads associated with the drilling operations for this pad would be contained in the same trench measuring approximately 12 ft wide, 10 ft deep, and 72 ft long (# wells x 8 ft + 16 ft for two end pieces). Drawings of below ground cellars can be provided by BBC upon request.

c. The tank battery would be surrounded by a secondary containment berm of sufficient capacity to contain the 1.1 times the entire capacity of the largest single tank and sufficient freeboard to contain precipitation. All loading lines and valves would be placed inside the berm surrounding the CTB or would utilize catchment basins to contain spills. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-2 and Onshore Oil and Gas Order No. 4 for the measurement of oil. Any variances from this would be submitted via a sundry notice. BBC requests permission to install the necessary production/operation facilities with this application.

d. Most wells would be fitted with a plunger lift system or potentially a pump jack or Roto-flex unit or gas lift to assist liquid production if liquid volumes and/or low formation pressures require it. Plunger lift systems do not require any outside source of energy. Plunger lift systems do not require any outside source of energy. The prime mover for pump jacks or Roto-flex units would be small (75 horsepower or less), natural gas-fired internal combustion engines. If a gas lift is installed, it would be set on a 10 ft x 15 ft pad and the prime mover would be a natural gas-fired internal combustion engine rated at 200 horsepower or less.

e. Gas meter run(s) would be constructed and located on lease within 500 feet of the wellheads. Meter runs would be housed and/or fenced. As practicably feasible, meters would be equipped with remote telemetry monitoring systems. All gas production and measurement shall comply with the provisions of 43 CFR 3162.7-3, Onshore Oil and Gas Order No. 5, and American Gas Association (AGA) Report No. 3 and any variances would be included with this submittal or submitted via sundry notice.

f. A combustor may be installed at this location for control of associated condensate tank emissions. A combustor ranges from 24 inches to 48 inches wide and is approximately 27 ft tall. Combustor placement would be on existing disturbance.

g. A gas gathering pipeline (up to 12 inch diameter) approximately 10,324 feet in length and two liquids lines (up to 6 inch diameter) are associated with this application and are being applied for at this time (see Topographic Map D). All lines would leave the southwest side of the pad and traverse in an easterly direction to the existing Horn Frog 8-9 Pad pipeline.

RECEIVED: Jul. 07, 2011

6. Source of Construction Material:

a. Gravel, if required, would be obtained from a local supplier having a permitted source of materials within the general area.

7. Methods of Handling Waste Disposal:

a. All wastes associated with this application would be contained and disposed of utilizing approved facilities.

b. A conventional or semi-closed loop, mud system is planned to be used where a small amount of fluid is retained in the cuttings and the cuttings are placed in the reserve pit.

c. The reserve pit would be constructed so as not to leak, break or allow any discharge with dimensions of 265 ft by 50 ft and located outboard of the location along the southwest side of the pad.

d. The reserve would be lined with 12 mil (minimum) thickness polyethylene nylon reinforced liner material. The liner(s) would overlay straw, dirt and/or bentonite if rock is encountered during excavation. The liner would overlap the pit walls and be covered with dirt and/or rocks to hold them in place. No trash, scrap pipe, or other materials that could puncture the liner would be discarded in the pit. A minimum of two feet of free board would be maintained between the maximum fluid level and the top of the reserve pit at all times.

e. To deter livestock from entering the pit, the three sides exterior to the location would be fenced before drilling starts. Following the conclusion of drilling and completion activities, the fourth side would also be fenced.

f. The reserve pit would also store water to make up losses and store any excess drilling fluids.

g. Three sides of the reserve pit would be fenced before drilling starts and the fourth side would be fenced at the time drilling is completed on the last well on the pad and shall remain until the pit is dry.

h. Any hydrocarbons floating on the surface of the reserve pit would be removed as soon as possible after drilling and completion operations are finished. In some cases, the reserve pit may be flagged overhead or covered with wire or plastic mesh to protect migrating birds.

h. Produced fluids from the wells other than water would be decanted into steel test tanks until such time as construction of production facilities is completed. Produced water may be used in further drilling and completion activities, evaporated in the pit or would be hauled to a state approved disposal facility.

i. After initial clean-up and based on volumes, BBC would install a tank, or several tanks if water production volumes merit, (maximum size 400 barrel capacity) to contain produced waste water. After first production, produced wastewater would be confined to tanks within the CTB for a period not to exceed ninety (90) days. Thereafter, produced water would be used in further drilling and completion activities or hauled to a State approved disposal facility.

j. Any salts and/or chemicals, which are an integral part of the drilling system, would be disposed of in the same manner as the drilling fluid.

k. Any spills of oil, condensate, produced or frac water, drilling fluids, or other potentially deleterious substances would be recovered and either returned to its origin or disposed of at an approved disposal site in Duchesne or Uintah Counties, Utah.

l. Chemicals on the EPA's Consolidated List of Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) may be used or stored in quantities over reportable quantities. In the course of drilling, BBC could potentially store and use

RECEIVED: Jul. 07, 2011

diesel fuel, sand (silica), hydrochloric acid, and CO_2 gas, all described as hazardous substances in 40 CFR Part 302, Section 302.4, in quantities exceeding 10,000 pounds. In addition, natural gas condensate and crude oil and methanol may be stored or used in reportable quantities. Small quantities of retail products (paint/spray paints, solvents {e.g., WD-40}, and lubrication oil) containing non-reportable volumes of hazardous substances may be stored and used on site at any time. No extremely hazardous substances, as defined in 40 CFR 355, would be used, produced, stored, transported or disposed of in association with the drilling, testing or completion of the wells.

m. Portable toilets and trash containers would be located onsite during drilling and completion operations. A commercial supplier would install and maintain portable toilets and equipment and would be responsible for removing sanitary waste. Sanitary waste facilities (i.e. toilet holding tanks) would be regularly pumped and their contents disposed of at approved sewage disposal facilities, in accordance with applicable rules and regulations regarding sewage treatment and disposal. Accumulated trash and nonflammable waste materials would be hauled to an approved landfill once a week or as often as necessary. All debris and waste materials not contained in the trash containers would be cleaned up, removed from the construction ROW, well pad, or worker housing location, and disposed of at an approved landfill. Trash would be cleaned up everyday.

n. Sanitary waste equipment and trash bins would be removed from the Project Area upon completion of access road or pipeline construction; following drilling and completion operations at an individual well pad; when worker housing is no longer needed; or as required.

o. A flare pit may be constructed a minimum of 110' from the wellhead(s) and may be used during completion work. In the event a flare pit proves to be unworkable, a temporary flare stack or open top tank would be installed. BBC would flow back as much fluid and gas as possible into pressurized vessels, separating the fluids from the gas. In some instances, due to the completion fluids utilized within the Project area, it is not feasible to direct the flow stream from the wellbore through pressurized vessels. In such instances BBC proposes to direct the flow to the open top tanks until flow through the pressurized vessels is possible. At which point the fluid would either be returned to the reserve pit or placed into a tank(s). The gas would be directed to the flare pit, flare stack (each with a constant source of ignition), or may be directed into the sales pipeline.

p. Flare lines would be directed so as to avoid damage to surrounding vegetation, adjacent rock faces, or other resources, and as required by regulations. Flare lines would be in place on all well locations. In the event it becomes necessary to flare a well, a deflector and/or directional orifice would also be used to safeguard both personnel and adjacent natural rock faces.

8. Ancillary Facilities:

a. Garbage containers and portable toilets would be located on the well pad.

b. On well pads where active drilling and completion is occurring, temporary housing would be provided on location for the well pad supervisor, geologist, tool pusher, and others that are required to be on location at all times. Active drilling locations could include up to five single wide mobile homes or fifth wheel campers/trailers.

9. Well Site Layout:

a. Each well would be properly identified in accordance with 43 CFR 3162.6

b. The pad has been staked at its maximum size of 380 ft x 305 ft with a 265 ft x 50 ft (4.593 acres) reserve pit/completion pit outboard of the pad. The location layout and cross section diagrams are enclosed.

c. Within the approved well pad location, a crawler tractor would strip whatever topsoil is present and stockpile it along the edge of the well pad for use during reclamation. Vegetation would be distributed along the sides of the well pad.

d. Fill from pit excavation would be stockpiled along the edge of the pit and the adjacent edge of the well pad.

e. Use of erosion control measures, including proper grading to minimize slopes, diversion terraces and ditches, mulching, terracing, riprap, fiber matting, temporary sediment traps, and broad-based drainage dips or low water crossings would be employed by BBC as necessary and appropriate to minimize erosion and surface runoff during well pad construction and operation. Cut and fill slopes would be constructed such that stability would be maintained for the life of the activity.

f. Construction of the well pad would take from 1 to 3 weeks depending on the features at the particular site.

g. Dust suppression may be implemented if necessary to minimize the amount of fugitive dust.

10. Plan for Restoration of the Surface:

a. Site reclamation would be accomplished for portions of the well pad not required for the continued operation of the well on this pad within six months of completion, weather permitting.

b. The operator would control noxious weeds along access road use authorizations and well site by spraying or mechanical removal. A list of noxious weeds may be obtained from the Ute Tribe or the appropriate county extension office. On Ute Tribe administered land it is required that a Pesticide Use Proposal be submitted and approved prior to the application of herbicides, pesticides or possibly hazardous chemicals.

c. Rat and mouse holes would be filled and compacted from bottom to top immediately upon release of the drilling rig from location. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. The reserve pit would be allowed to dry prior to the commencement of backfilling work. No attempts would be made to backfill the reserve pit until it is free of standing water. Once dry, the liner would be torn and perforated before backfilling.

d. The reserve pit and that portion of the location not needed for production facilities/operations would be recontoured to the approximate natural contours. Areas not used for production purposes would be backfilled and blended into the surrounding terrain, reseeded and erosion control measures installed. Mulching, erosion control measures and fertilization may be required to achieve acceptable stabilization. Back slopes and fore slopes would be reduced as practical and scarified with the contour. The reserved topsoil would be evenly distributed over the slopes and scarified along the contour. Slopes would be seeded with the Ute Tribe specified seed mix.

e. Topsoil salvaged from the drill site and stored for more than one year would be placed at the location indicated on the well site layout drawing and graded to a depth optimum to maintain topsoil viability, seeded with the Ute Tribe prescribed seed mixture and covered with mulch for protection from wind and water erosion and to discourage the invasion of weeds.

11. Surface and Mineral Ownership:

a. Surface & Mineral ownership – Ute Indian Tribe - 988 South 7500 East (Annex Building); Ft. Duchesne, Utah 84026; 435-725-4950.

b. Surface use is pending at this time.

RECEIVED: Jul. 07, 2011

12. Other Information:

a. Montgomery Archaeological Consultants conducted cultural resource inventories for this pad, access and pipelines under MOAC 04-51 and MOAC 10-151.

b. Project personnel and contractors would be educated on and subject to the following requirements:

- All project related personnel are to obtain, and have on their possession, the appropriate permits required at the time of operation to travel and operate on Ute Tribal lands.
- Access is restricted solely to those access roads and pads applied for approval within this application.
- No dogs or firearms within the Project Area;
- No littering within the Project Area;
- Smoking within the Project Area would only be allowed in off-operator active locations or in specifically designated smoking areas. All cigarette butts would be placed in appropriate containers and not thrown on the ground or out windows of vehicles; personnel and contractors would abide by all fire restriction orders;
- Campfires or uncontained fires of any kind would be prohibited.
- Portable generators used in the Project Area would have spark arrestors

RECEIVED: Jul. 07, 2011

OPERATOR CERTIFICATION

Certification:

I hereby certify that I, or someone under my direction supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein would be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filings of false statements.

Executed this 15th day of April 2011

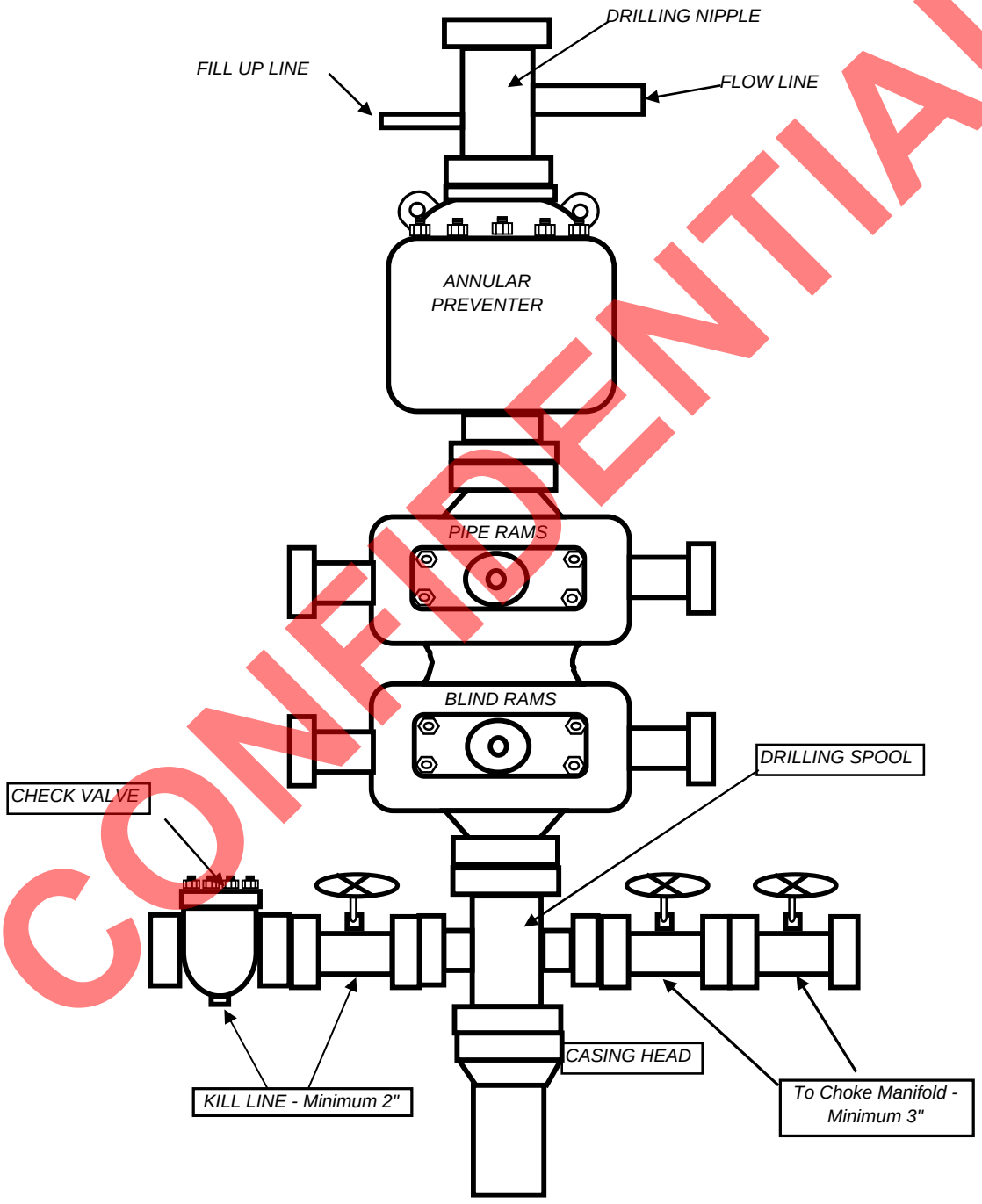
Name:	Tracey Fallang
Position Title:	Regulatory Manager
Address:	1099 18th Street, Suite 2300, Denver, CO 80202
Telephone:	303-312-8134
Field Representative	Brandon Murdock
Address:	1820 W. Hwy 40, Roosevelt, UT 84066
Telephone:	435-724-5252
E-mail:	bmurdock@billbarrettcorp.com

Tracey Fallang, Regulatory Manager

RECEIVED: Jul. 07, 2011

BILL BARRETT CORPORATION

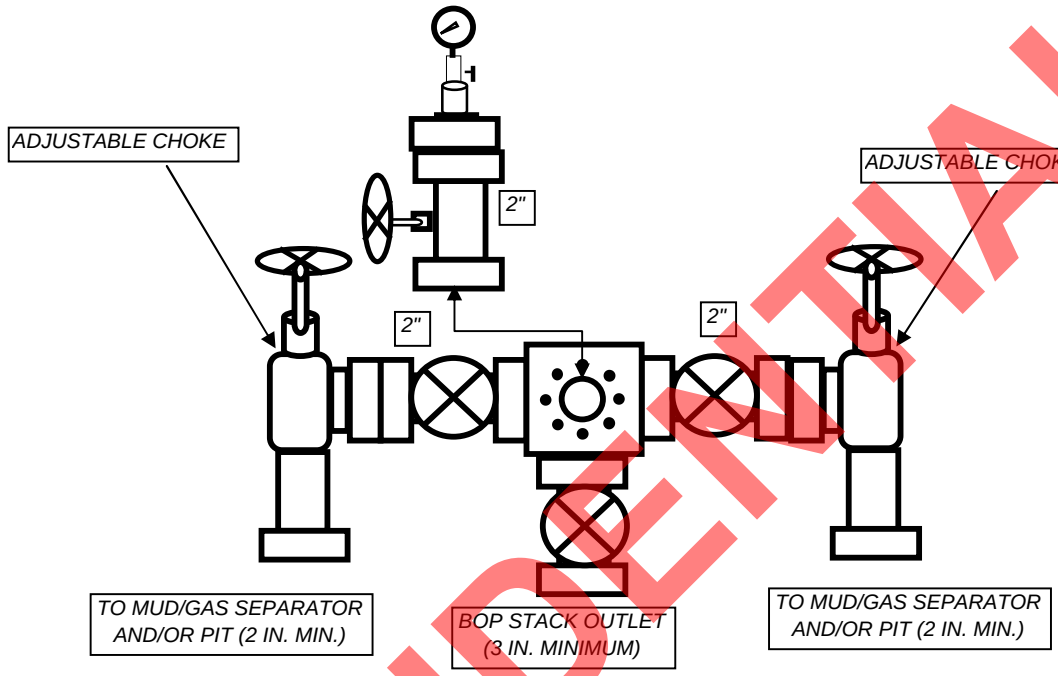
TYPICAL 3,000 p.s.i. BLOWOUT PREVENTER



RECEIVED: Jul. 07, 2011

BILL BARRETT CORPORATION

TYPICAL 3,000 p.s.i. CHOKE MANIFOLD



RECEIVED: Jul. 07, 2011

Bill Barrett Corporation

April 15, 2011

Ms. Diana Mason – Petroleum Technician
State of Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Re: Directional Drilling R649-3-11
Hornfrog Area #11-29D-13-18 Well
Surface: 2,455' FNL & 1,779' FEL, SWNE, 29-T13S-R18E, SLM
Bottom Hole: 1,971' FSL & 1,959' FWL, NESW, 29-T13S-R18E, SLM
Uintah County, Utah

Dear Ms. Mason:

With respect to Bill Barrett Corporation (BBC)'s Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rules R649-2, R649-3, R649-10 and R649-11, pertaining to the Location and Siting of Wells.

- The proposed location is within our Hornfrog Area.
- BBC is permitting this well as a directional well in order to minimize surface disturbance. By locating the well at the surface location and directionally drilling from this location, BBC will be able to utilize the existing road and pipelines in the area.
- The well will be drilled under an Exploration and Development Agreement between the Ute Indian Tribe and FIML Natural Resources, LLC (FIML). FIML and Ute Energy LLC own rights to participate in this well.
- BBC certifies that it is the working interest owner of all lands within 460 feet of the proposed well location, and together with FIML and Ute Energy we own 100% of the working interest in these lands.

Based on the information provided herein, BBC requests that the permit be granted pursuant to R649-3-11. Should you have any questions or need further information, please contact me at 303-312-8166.

Sincerely,
BILL BARRETT CORPORATION

Brian Wert by TLT

Brian Wert
Senior Landman

1099 18TH STREET
SUITE 2300
DENVER, CO 80202
P 303.293.9100
F 303.291.0420

RECEIVED: Jul. 07, 2011

BILL BARRETT CORPORATION

LOCATION LAYOUT FOR

HORN FROG #7-29 PAD
HORN FROG #3-29D-13-18, #7-29D-13-18, #6-29D-13-18,
#2-29D-13-18, #11-29D-13-18, #1-29D-13-18,
#10-29D-13-18, #8-29D-13-18 & #9-29D-13-18
SECTION 29, T13S, R18E, S.L.B.&M.
SW 1/4 NE 1/4

FIGURE #1
SCALE: 1" = 50'
DATE: 09-29-10
DRAWN BY: C.C.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH

Prevailing Winds

C-3.9'
El. 51.1'

Topsoil Stockpile

F-8.8'
El. 38.4'

Sta. 4+44

F-0.3'
El. 46.9'

Round Corners as Needed

Reserve Pit Backfill & Spoils Stockpile

140'

150'

NOTE:
Flare Pit is to be located a min. of 100' from the Well Head.

FLARE PIT

El. 52.3'
C-17.1'
(Btm. Pit)

10' WIDE BENCH

50'

C-4.2'
El. 51.4'

C-4.2'
El. 51.4'

C-1.1'
El. 48.3'

#3-29D
#7-29D
#6-29D
#2-29D
#11-29D
#1-29D
#10-29D
#8-29D
#9-29D

120'

185'

Sta. 2+94

F-4.6'
El. 42.6'

Approx. Toe of Fill Slope

Cut/Fill Transition Line

10' WIDE BENCH

265'

RESERVE PITS (12' Deep)

1 1/2:1 SLOPE

Total Pit Capacity
W/2' of Freeboard
= 12,740 Bbls.±
Total Pit Volume
= 3,560 Cu. Yds

Sta. 1+50

294'

230'

El. 51.6'
C-16.4'
(Btm. Pit)

10' WIDE BENCH

C-5.4'
El. 52.6'

39'

C-4.5'
El. 51.7'

Sta. 0+00

F-3.0'
El. 44.2'

C-6.3'
El. 53.5'

Approx. Top of Cut Slope

Proposed Access Road

6740

Elev. Ungraded Ground At Loc. Stake = 6748.3'
FINISHED GRADE ELEV. AT LOC. STAKE = 6747.2'

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

RECEIVED: Jul. 07, 2011

BILL BARRETT CORPORATION

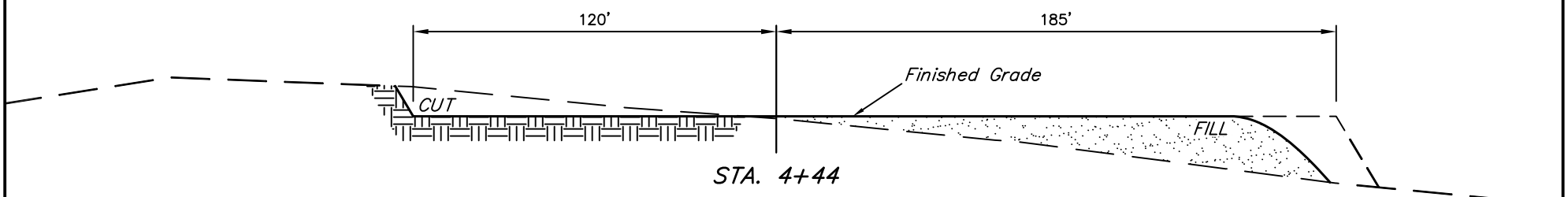
TYPICAL CROSS SECTIONS FOR

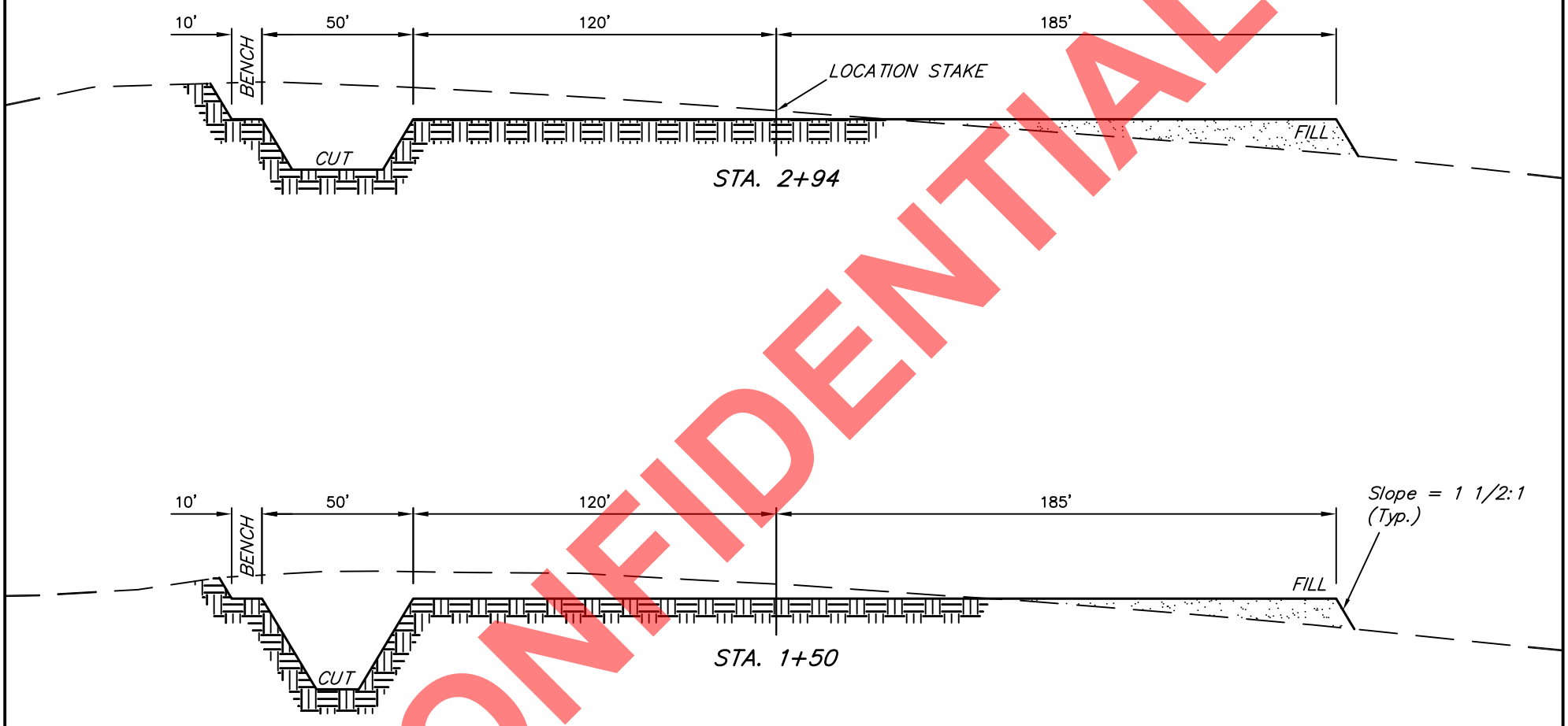
HORN FROG #7-29 PAD
HORN FROG #3-29D-13-18, #7-29D-13-18, #6-29D-13-18,
#2-29D-13-18, #11-29D-13-18, #1-29D-13-18,
#10-29D-13-18, #8-29D-13-18 & #9-29D-13-18
SECTION 29, T13S, R18E, S.L.B.&M.
SW 1/4 NE 1/4

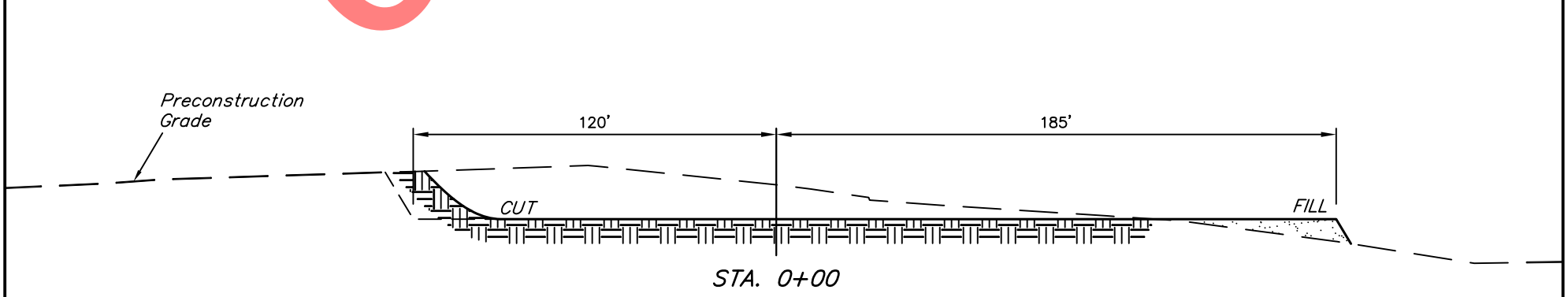
FIGURE #2

1" = 20' X-Section Scale
1" = 50'
DATE: 09-29-10
DRAWN BY: C.C.

REGISTERED LAND SURVEYOR
No. 161319
ROBERT L. KAY
STATE OF UTAH







NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

* *NOTE:*
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(6") Topsoil Stripping	=	*6,140* Cu. Yds.
Remaining Location	=	*10,350* Cu. Yds.
TOTAL CUT	=	*16,490* CU.YDS.
FILL	=	*8,570* CU.YDS.

EXCESS MATERIAL	=	*7,920* Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	*7,920* Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	*0* Cu. Yds.

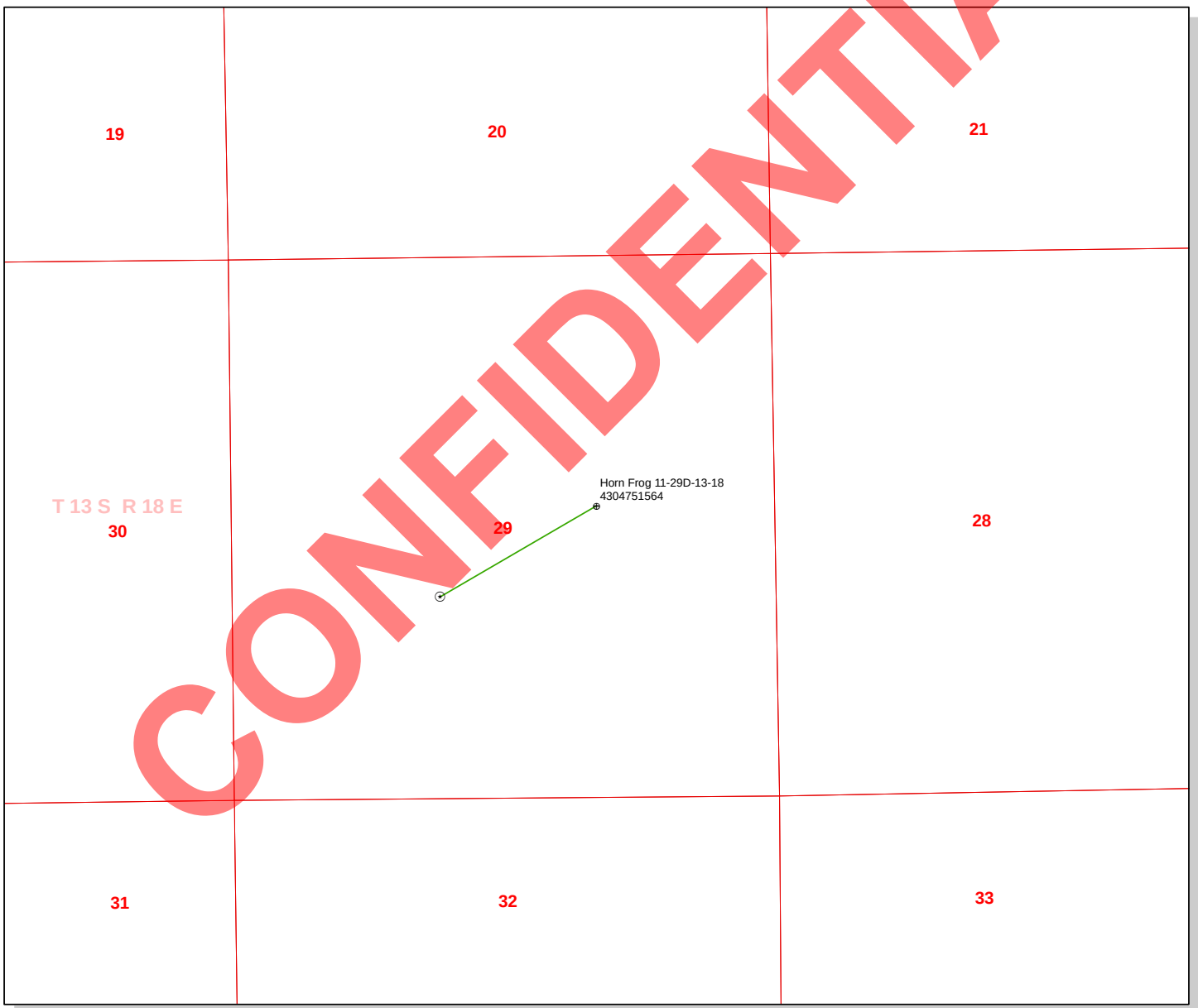
APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 4.593 ACRES
ACCESS ROAD DISTURBANCE = ± 7.144 ACRES
PIPELINE DISTURBANCE = ± 7.111 ACRES
TOTAL = ± 18.848 ACRES

UINTAH ENGINEERING & LAND SURVEYING
*85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017*

RECEIVED: Jul. 07, 2011

API Well Number: 43047515640000



API Number: 4304751564

Well Name: Horn Frog 11-29D-13-18

Township T1.3 . Range R1.8 . Section 29

Meridian: SLBM

Operator: BILL BARRETT CORP

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
ACTIVE
EXPLORATORY
GAS STORAGE
NF PP OIL
NF SECONDARY
PI OIL
PP GAS
PP GEOTHERML
PP OIL
SECONDARY
TERMINATED

Fields
STATUS
Unknown
ABANDONED
ACTIVE
COMBINED
INACTIVE
STORAGE
TERMINATED
Sections
Township

Wells Query
Status
APD - Aproved Permit
DRL - Spuded (Drilling Commenced)
GIW - Gas Injection
GS - Gas Storage
LA - Location Abandoned
LOC - New Location
OPS - Operation Suspended
PA - Plugged Abandoned
PGW - Producing Gas Well
POW - Producing Oil Well
RET - Returned APD
SGW - Shut-in Gas Well
SOW - Shut-in Oil Well
TA - Temp. Abandoned
TW - Test Well
WDW - Water Disposal
WIW - Water Injection Well
WSW - Water Supply Well

N

1,250 625 0 1,250 Feet

1:12,000

RECEIVED: Jul. 07, 2011

API Well Number: 43047515640000

BOPE REVIEW BILL BARRETT CORP Horn Frog 11-29D-13-18 43047515640000

Well Name	BILL BARRETT CORP Horn Frog 11-29D-13-18 43047515640(			
String	Cond	Surf	Prod	
Casing Size(")	14.000	9.625	4.500	
Setting Depth (TVD)	40	1500	7500	
Previous Shoe Setting Depth (TVD)	0	40	1500	
Max Mud Weight (ppg)	8.6	8.6	9.5	
BOPE Proposed (psi)		500	3000	
Casing Internal Yield (psi)	1000	3520	10640	
Operators Max Anticipated Pressure (psi)	3705		9.5	

Calculations	Cond String	14.000	"	
Max BHP (psi)	.052*Setting Depth*MW=	18		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	13	NO	air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	9	NO	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	9	NO	
Required Casing/BOPE Test Pressure=		40	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi	*Assumes 1psi/ft frac gradient

Calculations	Surf String	9.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	671		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	491	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	341	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	350	NO	OK
Required Casing/BOPE Test Pressure=		1500	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		40	psi	*Assumes 1psi/ft frac gradient

Calculations	Prod String	4.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	3705		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2805	YES	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2055	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2385	NO	Reasonable
Required Casing/BOPE Test Pressure=		3000	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		1500	psi	*Assumes 1psi/ft frac gradient

Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	

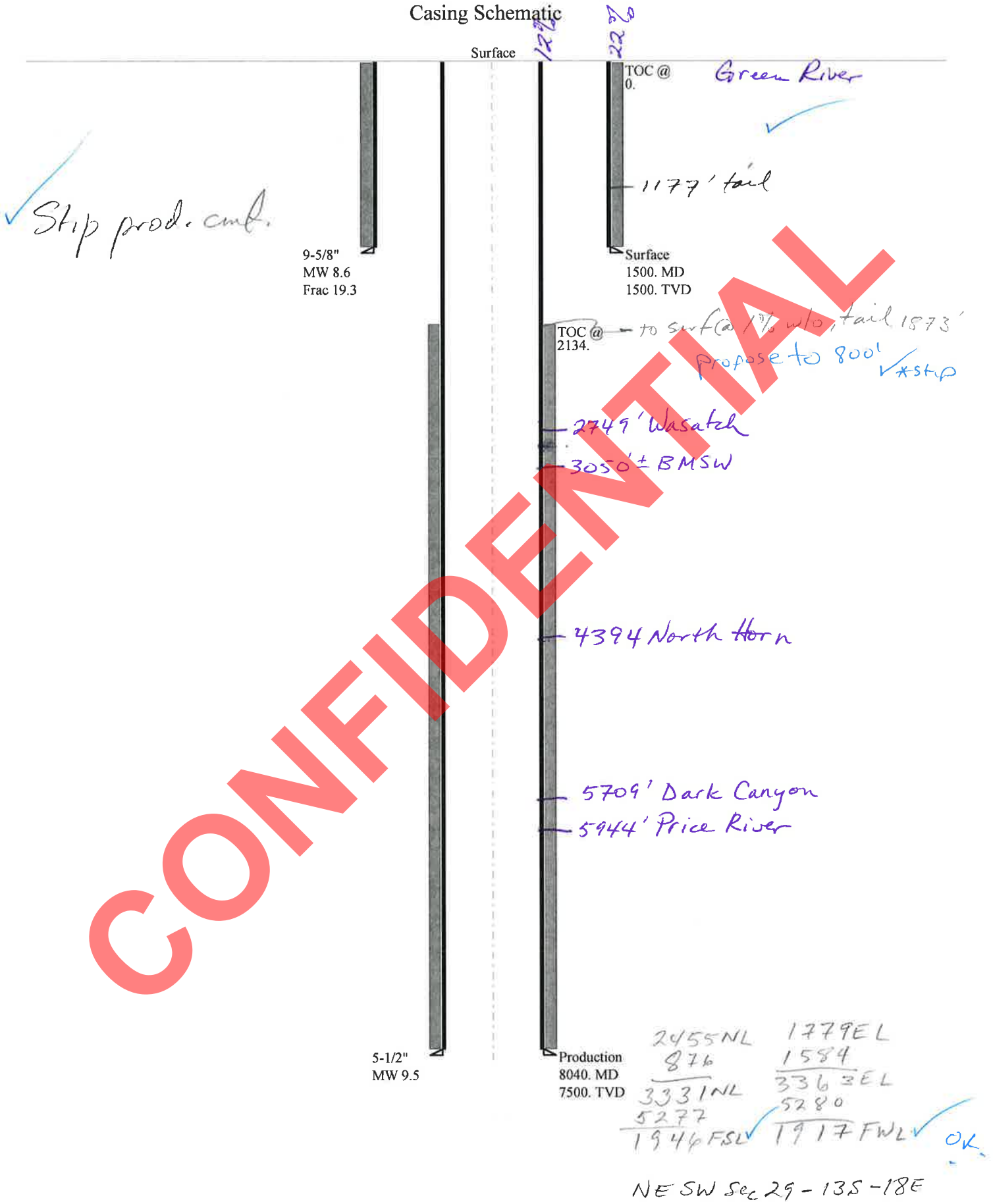
RECEIVED: Jul. 07, 2011

***Max Pressure Allowed @ Previous Casing Shoe=**		psi *Assumes 1psi/ft frac gradient

RECEIVED: Jul. 07, 2011

43047515640000 Horn Frog 11-29D-13-18

Casing Schematic



RECEIVED: Jul. 07, 2011

Well name:	**43047515640000 Horn Frog 11-29D-13-18**
Operator:	**BILL BARRETT CORP**
String type:	Surface
Project ID:	43-047-51564
Location:	UINTAH COUNTY

Design parameters:

Collapse
Mud weight: 8.600 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,320 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,500 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 1,309 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 95 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Non-directional string.

Re subsequent strings:
Next setting depth: 8,040 ft
Next mud weight: 9.500 ppg
Next setting BHP: 3,968 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 1,500 ft
Injection pressure: 1,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	1500	9.625	36.00	J-55	ST&C	1500	1500	8.796	13037

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	670	2020	3.015	1500	3520	2.35	54	394	7.30 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: June 29,2011
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.6 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

RECEIVED: Jul. 07, 2011

Well name:	**43047515640000 Horn Frog 11-29D-13-18**
Operator:	**BILL BARRETT CORP**
String type:	Production
Project ID:	43-047-51564
Location:	UINTAH COUNTY

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,051 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 3,701 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 6,974 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 179 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: Surface

Directional Info - Build & Hold
Kick-off point 1600 ft
Departure at shoe: 1811 ft
Maximum dogleg: 5 °/100ft
Inclination at shoe: 2 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	8040	4.5	11.60	P-110	LT&C	7500	8040	3.875	38737

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	3701	7580	2.048	3701	10690	2.89	87	279	3.21 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: June 29,2011
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 7500 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

RECEIVED: Jul. 07, 2011

Well name:	**43047515640000 Horn Frog 11-29D-13-18**
Operator:	**BILL BARRETT CORP**
String type:	Production
Project ID:	43-047-51564
Location:	UINTAH COUNTY

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,051 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 3,701 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 6,959 ft

Environment:
H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 179 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 2,134 ft

Directional Info - Build & Hold
Kick-off point 1600 ft
Departure at shoe: 1811 ft
Maximum dogleg: 5 °/100ft
Inclination at shoe: 2 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	8040	5.5	17.00	P-110	LT&C	7500	8040	4.767	52958

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	3701	7480	2.021	3701	10640	2.87	127.5	445	3.49 J

Evaluated for 4½" 11.6# P-110 which has greater strength properties HSM

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940
Date: June 29,2011
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 7500 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

RECEIVED: Jul. 07, 2011

Application for Permit to Drill
Statement of Basis

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
3639	43047515640000	LOCKED	GW	I	No
Operator	BILL BARRETT CORP		**Surface Owner-APD**		
Well Name	Horn Frog 11-29D-13-18		**Unit**		
Field	WILDCAT		**Type of Work**	DRILL	
Location	SWNE 29 13S 18E S 2455 FNL 1779 FEL		GPS Coord (UTM)	592436E	4390170N

Geologic Statement of Basis

Bill Barrett proposes to set 1,500 feet of surface casing cemented to the surface. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the proposed location. The base of the moderately saline water is estimated at 3,050 feet. The surface formation at the proposed location is the Green River Formation. The Green River Formation is made up of interbedded sandstones, limestones and shales. This location is in a recharge area for the aquifers of the upper Green River Formation and fresh water can be expected to be found in the upper Green River. Production casing cement should be brought up above the base of the moderately saline ground water in order to isolate it from fresher waters uphole.

Brad Hill	5/2/2011
APD Evaluator	**Date / Time**

Surface Statement of Basis

The Ute Indian Tribe is the surface owner at this location. The operator is responsible for obtaining any needed permits or rights of way before causing any surface disturbance or drilling.

Brad Hill	5/2/2011
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	None

RECEIVED: Jul. 07, 2011

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/20/2011
API NO. ASSIGNED: 43047515640000
WELL NAME: Horn Frog 11-29D-13-18
OPERATOR: BILL BARRETT CORP (N2165)
PHONE NUMBER: 303 312-8134
CONTACT: Tracey Fallang

PROPOSED LOCATION: SWNE 29 130S 180E
Permit Tech Review: ☑

SURFACE: 2455 FNL 1779 FEL
Engineering Review: ☑

BOTTOM: 1971 FSL 1959 FWL
Geology Review: ☑

COUNTY: UINTAH
LATITUDE: 39.65822
LONGITUDE: -109.92250
UTM SURF EASTINGS: 592436.00
NORTHINGS: 4390170.00
FIELD NAME: WILDCAT
LEASE TYPE: 4 - Fee
LEASE NUMBER: UIT-EDA-001-000
PROPOSED PRODUCING FORMATION(S): GREEN RIVER-WASATCH
SURFACE OWNER: 2 - Indian
COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** STATE/FEE - LPM 4138148
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** Water Permit # 43-10991
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: R649-3-11
Effective Date:
Siting:

- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
4 - Federal Approval - dmason
5 - Statement of Basis - bhill
9 - Cement casing to Surface - ddoucet
15 - Directional - dmason
23 - Spacing - dmason

RECEIVED: Jul. 07, 2011

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: Horn Frog 11-29D-13-18
API Well Number: 43047515640000
Lease Number: UIT-EDA-001-000
Surface Owner: INDIAN
Approval Date: 7/7/2011

Issued to:
BILL BARRETT CORP, 1099 18th Street Ste 2300, Denver, CO 80202

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the GREEN RIVER-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

The cement volumes for the production casing shall be determined from actual hole conditions and the setting depth of the casing in order to place cement from the pipe setting depth back to 800' MD as indicated in the submitted drilling plan.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

Contact Information:
The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

API Well No: 43047515640000

Approved By:

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UIT-EDA-001-000

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: HORN FROG 11-29D-13-18

2. NAME OF OPERATOR: BILL BARRETT CORP

9. API NUMBER: 43047515640000

3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202

PHONE NUMBER: 303 312-8164 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2455 FNL 1779 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 29 Township: 13.0S Range: 18.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/3/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DRILLING REPORT Report Date:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This sundry is being submitted to request an extension on the APD which expires on 7/7/2012.

Approved by the Utah Division of Oil, Gas and Mining

Date: July 11, 2012

By: 

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Megan Finnegan	303 299-9949	Permit Analyst

SIGNATURE	DATE
N/A	7/3/2012

RECEIVED: Jul. 03, 2012

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047515640000

API: 43047515640000
Well Name: HORN FROG 11-29D-13-18
Location: 2455 FNL 1779 FEL QTR SWNE SEC 29 TWNP 130S RNG 180E MER S
Company Permit Issued to: BILL BARRETT CORP
Date Original Permit Issued: 7/7/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Megan Finnegan **Date:** 7/3/2012
Title: Permit Analyst **Representing:** BILL BARRETT CORP

RECEIVED: Jul. 03, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UIT-EDA-001-000

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: HORN FROG 11-29D-13-18

2. NAME OF OPERATOR: BILL BARRETT CORP

9. API NUMBER: 43047515640000

3. ADDRESS OF OPERATOR: 1099 18th Street Ste 2300 , Denver, CO, 80202

PHONE NUMBER: 303 312-8134 Ext

9. FIELD and POOL or WILDCAT: WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 2455 FNL 1779 FEL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 29 Township: 13.0S Range: 18.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/7/2013	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This sundry is being submitted to request an extension on this APD which expires on 7/7/2013.

Approved by the Utah Division of Oil, Gas and Mining

Date: June 04, 2013

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Brady Riley	303 312-8115	Permit Analyst
SIGNATURE N/A		**DATE** 6/3/2013

RECEIVED: Jun. 03, 2013

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047515640000

API: 43047515640000
Well Name: HORN FROG 11-29D-13-18
Location: 2455 FNL 1779 FEL QTR SWNE SEC 29 TWNP 130S RNG 180E MER S
Company Permit Issued to: BILL BARRETT CORP
Date Original Permit Issued: 7/7/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Brady Riley **Date:** 6/3/2013
Title: Permit Analyst **Representing:** BILL BARRETT CORP

RECEIVED: Jun. 03, 2013

GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

August 20, 2014

Bill Barrett Corp.
1099 18TH Street, Suite 2300
Denver, CO 80202

Re: APD Rescinded – Horn Frog 11-29D-13-18, Sec. 29 T.13S, R.18E
Uintah County, Utah API No. 43-047-51564

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on July 7, 2011. On July 11, 2012, and June 4, 2013, the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective August 20, 2014.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Bureau of Land Management, Vernal

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING